

# EXHIBIT E

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Scott Sturges Andrews

Application No.: 15/947,767

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Title: SYSTEM FOR LOCATION BASED TRIGGERS  
FOR MOBILE DEVICES

Confirmation No.: 8238

Examiner: MANOHARAN, MUTHUSWAMY  
GANAPATHY

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**AMENDMENT A**

Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

Examiner:

In response to the Office Action dated 6/27/2018, please enter the following.

**Amendments to the Summary:**

On page 6, please amend paragraph [0005] as follows:

[0005] In other embodiments, different systems are provided which omit one or more features of the previous embodiment(s). Further, in some embodiments, the first wireless communications protocol may be configured for communicating on a low-bandwidth sensor network and the second wireless communications protocol is configured for communicating on a WiFi or cellular network. Still yet, in other embodiments, the first wireless communications protocol may be configured for communicating on an 802.15 network and the second wireless communications protocol is configured for communicating on a WiFi or cellular network.

**Amendments to the Claims:**

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently Amended) A system, comprising:

a building including a plurality of facilities therein, the building including:

a first broadcast short-range communications unit having a first fixed location and configured to:

generate one or more first broadcast messages including at least one first value,

broadcast, via a first wireless communications protocol, the one or more first broadcast messages including the at least one first value, for intended receipt by a plurality of mobile devices in a communication range of the first broadcast short-range communications unit, and

re-broadcast, via the first wireless communications protocol, the one or more first broadcast messages including the at least one first value, for intended receipt by the plurality of mobile devices in the communication range of the first broadcast short-range communications unit, and

a second broadcast short-range communications unit having a second fixed location and configured to:

generate one or more second broadcast messages including at least one second value,

broadcast, via the first wireless communications protocol, the one or more second broadcast messages including the at least one second value, for intended receipt by the plurality of mobile devices in a communication range of the second broadcast short-range communications unit, and

re-broadcast, via the first wireless communications protocol, the one or more second broadcast messages including the at least one second value, for intended receipt by the plurality of mobile devices in the communication range of the second broadcast short-range communications unit;

code configured to be executed by at least one of the plurality of mobile devices, the code, when executed, configured to:

cause display, via a display of the at least one mobile device, of an option for causing first visual information and second visual information to be output via the at least one mobile device,

receive an indication of a user input for the option displayed via the display of the at least one mobile device,

receive an indication of a receipt, from the first broadcast short-range communications unit and via the first wireless communications protocol, of the one or more first broadcast messages including the at least one first value,

receive an indication of a receipt, from the second broadcast short-range communications unit and via the first wireless communications protocol, of the one or more second broadcast messages including the at least one second value, and

cause to be sent, from the at least one mobile device and via a second wireless communications protocol and an Internet Protocol over the Internet at least in part, at least one message, where the first wireless communications protocol and the second wireless communications protocol are different and a first range of the first broadcast short-range communications unit and the second broadcast short-range communications unit when using the first wireless communications protocol is shorter than a second range of the at least one mobile device when using the second wireless communications protocol, and further where the at least one message does not pass through the first broadcast short-range communications unit nor the second broadcast short-range communications unit when sent from the at least one mobile device and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part; and

at least one server that is configured to communicate with the at least one mobile device via the Internet, the at least one server configured to:

receive, from the at least one mobile device and via the Internet protocol over the Internet at least in part, the at least one message,

in response to the receipt, from the at least one mobile device and via the Internet protocol over the Internet at least in part, of the at least one message: retrieve first location-relevant information and second location-relevant information, and

after the location-relevant information is retrieved, cause to be sent, from the at least one server to the at least one mobile device and via the Internet protocol over the Internet at least in part, a response message including the first location-relevant information and the second location-relevant information;

said code, when executed, further configured to:

receive, from the at least one server and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part, the response message including the first location-relevant information and the second location-relevant information,

after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the first location-relevant information and the second location-relevant information: cause to be output, via the at least one mobile device, the first visual information based on the first location-relevant information, and

after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the first location-relevant information and the second location-relevant information; after the first visual information is caused to be output based on the first location-relevant information; and after the at least one mobile device is moved in the building: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information;

wherein the system is configured such that the first visual information is automatically caused to be output without requiring communication of the at least one message with the first broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more first broadcast messages, and the second visual information is automatically caused to be output without requiring communication of the at least one message with the second broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more second broadcast messages.

2. (Currently Amended) The system of Claim 1, wherein the system is configured such that the at least one message and the response are communicated: after the receipt of the indication of the receipt of the user input while the at least one mobile device is already turned on, before the receipt of the indication of the receipt of the one or more first broadcast



messages, and before the receipt of the indication of the receipt of the one or more second broadcast messages.

3. (Previously Presented) The system of Claim 1, wherein the system is configured such that the at least one first value is associated with the first location-relevant information, and the at least one second value is associated with the second location-relevant information.

4. (Previously Presented) The system of Claim 1, wherein the system is configured such that the output of the first visual information and the second visual information are conditionally caused based on whether a mobile device-specific threshold has been met.

5. (Previously Presented) The system of Claim 1, wherein the system is configured such that the first broadcast short-range communications unit broadcasts the one or more first broadcast messages and the second broadcast short-range communications unit broadcasts the one or more second broadcast messages, so that both the one or more first broadcast messages and the one or more second broadcast messages include: a first identifier field with at least one third value that is the same, and a second identifier field with at least one of the at least one first value or the at least one second value that are different, so that the second location-relevant information is caused as the at least one mobile device is moved among the plurality of the facilities of the building.

6. (Previously Presented) The system of Claim 5, and further comprising a computer configured to display at least one configuration interface for receiving an administrator input in connection with the at least one first value, the at least one second value, and the at least one third value.

7. (Previously Presented) The system of Claim 1, wherein the system is configured such that, after the receipt of the indication of the user input, the first visual information is automatically caused to be output in response to the receipt of the indication of the receipt of the one or more first broadcast messages that are broadcasted after the receipt of the indication of the user input, and the second visual information is automatically caused to be output in response to the receipt of the indication of the receipt of the one or more second broadcast messages that are broadcasted after the receipt of the indication of the user input.

8. (Cancelled)

9. (Previously Presented) The system of Claim 1, wherein the system is configured such that both the first visual information and the second visual information are based on user-specific demographic and preference information, and different brand- or product-specific visual information is caused to be output as the at least one mobile device is moved among the plurality of facilities in the building.

10. (Previously Presented) The system of Claim 1, wherein the first broadcast short-range communications unit is incapable of accessing the first location-relevant information, and the second broadcast short-range communications unit is incapable of accessing the second location-relevant information.

11. (Previously Presented) The system of Claim 1, wherein the system is configured such that both the first visual information and the second visual information are output based on user feedback information received from a user of the at least one mobile device.

12. (Previously Presented) The system of Claim 1, wherein the system is configured such that both the first visual information and the second visual information are output without additional user input after the user input.

13. (Previously Presented) The system of Claim 1, wherein at least one of:

the building includes a shopping mall, and the plurality of facilities include different private facilities associated with different brands, and further include at least one public food court that includes at least one public food court broadcast short-range communications unit; or

the building includes a retail space, and the plurality of facilities have different locations in the retail space and are associated with different product types.

14. (Cancelled)

15. (Currently Amended) A system, comprising:

a building including a plurality of facilities therein, the building including:

a first broadcast short-range communications unit having a first fixed location and configured to:

generate one or more first broadcast messages including at least one first value,

broadcast, via a first wireless communications protocol, the one or more first broadcast messages including the at least one first value, for intended receipt by a plurality of mobile devices in a communication range of the first broadcast short-range communications unit, and

re-broadcast, via the first wireless communications protocol, the one or more first broadcast messages including the at least one first value, for intended receipt by the plurality of mobile devices in the communication range of the first broadcast short-range communications unit, and

a second broadcast short-range communications unit having a second fixed location and configured to:

generate one or more second broadcast messages including at least one second value,

broadcast, via the first wireless communications protocol, the one or more second broadcast messages including the at least one second value, for intended receipt by the plurality of mobile devices in a communication range of the second broadcast short-range communications unit, and

re-broadcast, via the first wireless communications protocol, the one or more second broadcast messages including the at least one second value, for intended receipt by the plurality of mobile devices in the communication range of the second broadcast short-range communications unit;

code configured to be executed by at least one of the plurality of mobile devices, the code, when executed, configured to:

cause display, via a display of the at least one mobile device, of an option for causing first visual information and second visual information to be output via the at least one mobile device,

receive an indication of a user input for the option displayed via the display of the at least one mobile device,

receive an indication of a receipt, from the first broadcast short-range communications unit and via the first wireless communications protocol, of the one or more first broadcast messages including the at least one first value,

in response to the indication of the receipt, from the first broadcast short-range communications unit and via the first wireless communications protocol, of the one or more first broadcast messages including the at least one first value: cause to be sent, from the at least one mobile device and via a second wireless communications protocol and an Internet Protocol over the Internet at least in part, at least one first message, where the first wireless

communications protocol and the second wireless communications protocol are different and a first range of the first broadcast short-range communications unit and the second broadcast short-range communications unit when using the first wireless communications protocol is shorter than a second range of the at least one mobile device when using the second wireless communications protocol, and further where the at least one first message does not pass through the first broadcast short-range communications unit when sent from the at least one mobile device and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part;

receive an indication of a receipt, from the second broadcast short-range communications unit and via the first wireless communications protocol, of the one or more second broadcast messages including the at least one second value, and

in response to the indication of the receipt, from the second broadcast short-range communications unit and via the first wireless communications protocol, of the one or more second broadcast messages including the at least one second value: cause to be sent, from the at least one mobile device and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part, at least one second message, where the at least one second message does not pass through the second broadcast short-range communications when sent from the at least one mobile device and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part;

at least one server that is configured to communicate with the at least one mobile device via the Internet, the at least one server configured to:

receive, from the at least one mobile device and via the Internet protocol over the Internet at least in part, the at least one first message,

in response to the receipt, from the at least one mobile device and via the Internet protocol over the Internet at least in part, of the at least one first message: retrieve first location-relevant information,

in response to the first location-relevant information being retrieved, cause to be sent, from the at least one server to the at least one mobile device and via the Internet protocol over the Internet at least in part, a first response message including the first location-relevant information;

receive, from the at least one mobile device and via the Internet protocol over the Internet at least in part, the at least one second message,

in response to the receipt, from the at least one mobile device and via the Internet protocol over the Internet at least in part, of the at least one second message: retrieve second location-relevant information,

in response to the second location-relevant information being retrieved, cause to be sent, from the at least one server to the at least one mobile device and via the Internet protocol over the Internet at least in part, a second response message including the second location-relevant information;

said code, when executed, further configured to:

receive, from the at least one server and via the second wireless communications protocol, the first response message including the first location-relevant information,

in response to the receipt, from the at least one server and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part, of the first response message including the first location-relevant information: cause to be output, via the at least one mobile device, the first visual information based on the first location-relevant information,

receive, from the at least one server and via the second wireless communications protocol, the second response message including the second location-relevant information,

after the first visual information is caused to be output based on the first location-relevant information; after the at least one mobile device is moved in the building; and in response to the receipt, from the at least one server and via the second wireless communications protocol, of the second response message including the second location-relevant information: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information;



wherein the system is configured such that the first visual information is automatically caused to be output without requiring communication of the at least one first message with the first broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more first broadcast messages, and the second visual information is automatically caused to be output without requiring communication of the at least one second message with the second broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more second broadcast messages.

16. (Previously Presented) The system of Claim 15, wherein the first broadcast short-range communications unit is incapable of accessing the first location-relevant information, and the second broadcast short-range communications unit is incapable of accessing the second location-relevant information.

17. (Previously Presented) The system of Claim 15, wherein the system is configured such that the at least one first value is associated with the first location-relevant information, and the at least one second value is associated with the second location-relevant information.

18. (Previously Presented) The system of Claim 15, wherein the system is configured such that the output of the first visual information and the second visual information are conditionally caused based on whether a mobile device-specific threshold has been met.

19. (Previously Presented) The system of Claim 15, wherein the system is configured such that the first broadcast short-range communications unit broadcasts the one or more first broadcast messages and the second broadcast short-range communications unit broadcasts the one or more second broadcast messages, so that both the one or more first broadcast messages and the one or more second broadcast messages include: a first identifier field with

at least one third value that is the same, and a second identifier field with at least one of the at least one first value or the at least one second value that are different, so that the second location-relevant information is caused as the at least one mobile device is moved among the plurality of the facilities of the building.

20. (Previously Presented) The system of Claim 19, and further comprising a computer configured to display at least one configuration interface for receiving an administrator input in connection with the at least one first value, the at least one second value, and the at least one third value.

21. (Previously Presented) The system of Claim 15, wherein the system is configured such that, after the receipt of the indication of the user input, the first visual information is automatically caused to be output in response to the receipt of the indication of the receipt of the one or more first broadcast messages that are broadcasted after the receipt of the indication of the user input, and the second visual information is automatically caused to be output in response to the receipt of the indication of the receipt of the one or more second broadcast messages that are broadcasted after the receipt of the indication of the user input.

22. (Cancelled)

23. (Previously Presented) The system of Claim 15, wherein the system is configured such that both the first visual information and the second visual information are based on user-specific demographic and preference information, and different brand- or product-specific visual information is caused to be output as the at least one mobile device is moved among the plurality of facilities in the building.

24. (Previously Presented) The system of Claim 23, wherein the system is configured such that the user-specific demographic and preference information is received based on particular user input from a user of the at least one mobile device.

25. (Previously Presented) The system of Claim 15, wherein the system is configured such that both the first visual information and the second visual information are output based on user feedback information received from a user of the at least one mobile device.

26. (Previously Presented) The system of Claim 15, wherein the system is configured such that both the first visual information and the second visual information are output without additional user input after the user input.

27. (Previously Presented) The system of Claim 15, wherein the building includes a shopping mall, and the plurality of facilities include different private facilities associated with different brands, and further include at least one public food court that includes at least one public food court broadcast short-range communications unit; or the building includes a retail space, and the plurality of facilities have different locations in the retail space and are associated with different product types.

28. (Currently Amended) A system, comprising:

a building including a plurality of facilities therein, the building including:

a first broadcast short-range communications unit having a first fixed location and configured to:

generate one or more first broadcast messages including at least one first value,

broadcast, via a first wireless communications protocol, the one or more first broadcast messages including the at least one first value, for intended receipt by a plurality of mobile devices in a communication range of the first broadcast short-range communications unit, and

re-broadcast, via the first wireless communications protocol, the one or more first broadcast messages including the at least one first value, for intended receipt by the plurality of mobile devices in the communication range of the first broadcast short-range communications unit, and

a second broadcast short-range communications unit having a second fixed location and configured to:

generate one or more second broadcast messages including at least one second value,

broadcast, via the first wireless communications protocol, the one or more second broadcast messages including the at least one second value, for intended receipt by the plurality of mobile devices in a

communication range of the second broadcast short-range communications unit, and

re-broadcast, via the first wireless communications protocol, the one or more second broadcast messages including the at least one second value, for intended receipt by the plurality of mobile devices in the communication range of the second broadcast short-range communications unit;

code configured to be executed by at least one of the plurality of mobile devices, the code, when executed, configured to:

cause display, via a display of the at least one mobile device, of an option for causing first visual information and second visual information to be output via the at least one mobile device,

receive an indication of a user input for the option displayed via the display of the at least one mobile device,

receive an indication of a receipt, from the first broadcast short-range communications unit and via the first wireless communications protocol, of the one or more first broadcast messages including the at least one first value,

receive an indication of a receipt, from the second broadcast short-range communications unit and via the first wireless communications protocol, of the

one or more second broadcast messages including the at least one second value,  
and

cause to be sent, from the at least one mobile device and via a second wireless communications protocol and an Internet Protocol over the Internet at least in part, at least one message, where the first wireless communications protocol and the second wireless communications protocol are different and a first range of the first broadcast short-range communications unit and the second broadcast short-range communications unit when using the first wireless communications protocol is shorter than a second range of the at least one mobile device when using the second wireless communications protocol, and further where the at least one message does not pass through the first broadcast short-range communications unit nor the second broadcast short-range communications unit when sent from the at least one mobile device and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part; and

at least one server configured to:

receive, from the at least one mobile device and via the Internet protocol over the Internet at least in part, the at least one message,

after the receipt, from the at least one mobile device and via the Internet protocol over the Internet at least in part, of the at least one message: retrieve at least one of first location-relevant information or second location-relevant information, and

cause to be sent, from the at least one server to the at least one mobile device and via the Internet protocol over the Internet at least in part, the first location-relevant information;

cause to be sent, from the at least one server to the at least one mobile device and via the Internet protocol over the Internet at least in part, the second location-relevant information;

said code, when executed, further configured to:

receive, from the at least one server and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part, the first location-relevant information,

receive, from the at least one server and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part, the second location-relevant information,

after the receipt, from the at least one server and via the second wireless communications protocol, of the first location-relevant information: cause to be output, via the at least one mobile device, the first visual information based on the first location-relevant information, and

after the receipt, from the at least one server and via the second wireless communications protocol, of the second location-relevant information; after the first visual information is caused to be output based on the first location-relevant information; and after the at least one mobile device is moved in the building: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information;

wherein the system is configured such that the first visual information is automatically caused to be output without requiring communication of the at least one message with the first broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more first broadcast messages, and the second visual information is automatically caused to be output without requiring communication of the at least one message with the second broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more second broadcast messages.

29. (Currently Amended) The system of Claim 28, wherein the building includes a shopping mall, and the plurality of facilities include different private facilities associated with different brands, and further include at least one public food court that includes at least one public food court broadcast short-range communications unit[[: or]].

30. (Previously Presented) The system of Claim 28, wherein the building includes a retail space, and the plurality of facilities have different locations in the retail space and are associated with different product types.



31. (New) The system of Claim 1, wherein the first wireless communications protocol is configured for communicating on a sensor network and the second wireless communications protocol is configured for communicating on a WiFi or cellular network.

32. (New) The system of Claim 15, wherein the first wireless communications protocol is configured for communicating on a sensor network and the second wireless communications protocol is configured for communicating on a WiFi or cellular network.

33. (New) The system of Claim 28, wherein the first wireless communications protocol is configured for communicating on an 802.15 network and the second wireless communications protocol is configured for communicating on a WiFi or cellular network.

34. (New) The system of Claim 3, wherein at least one of:

a location of the at least one mobile device is capable of being identified by cooperating with a plurality of wireless components utilizing received signal strength measurements;

the second wireless communications protocol includes a WiFi wireless communications protocol;

the second wireless communications protocol includes a cellular wireless communications protocol;

the at least one message includes the at least one first value,

the at least one message includes the at least one first value, and the at least one first value takes the same form in connection with the one or more first broadcast messages and the at least one message;

the indication of the user input includes a signal that results from a detection of the user input;

the indication of the receipt of the one or more first broadcast messages includes a signal that results from the receipt of the one or more first broadcast messages;

the indication of the receipt of the one or more first broadcast messages, includes the at least one first value;

the indication of the receipt of the one or more first broadcast messages includes an address portion, a plurality of fields, and the at least one first value;

the at least one first value includes an address;

the at least one first value includes an identifier;

the option is displayed in connection with a message and the user input involves a contact to a predetermined location;

the option involves a preference setting;

the option is associated with a use of the code;

the option for causing to be output, via the at least one mobile device, the first visual information and the second visual information, is for allowing the user to control whether the system operates to output the first visual information and the second visual information;

the option for causing to be output, via the at least one mobile device, the first visual information and the second visual information, is for allowing the user to control whether the system operates to output the first visual information and the second visual information in connection with the building;

the option for causing to be output, via the at least one mobile device, the first visual information and the second visual information, is for allowing the user to control whether the system operates to send the at least one message and receive the first location-relevant information and the second location-relevant information, in order to output the first visual information and the second visual information;

the at least one message is caused to be sent before the receipt of the indication of the user input;

the at least one message is caused to be sent after the receipt of the indication of the user input;

the at least one message is caused to be sent in response to the receipt of the indication of the user input;

the at least one message includes the at least one first value;

the at least one message is based on the at least one first value;

the at least one message is independent of the at least one first value;

the at least one message is used in retrieving the first location-relevant information by being used to locate the first location-relevant information;

the at least one message is caused to be sent over the Internet at least in part, such that the at least one message travels along a path that includes a first part that includes at least a portion of the Internet, and a second part that includes at least a portion of another network that is separate from the Internet;

the at least one message is caused to be sent over the Internet at least in part, such that the at least one message travels along a path that includes only the Internet;

the first and second broadcast short-range communications unit are short-range by virtue of, when using the first wireless communications protocol, the first range is shorter than

the second range of the at least one mobile device when using the second wireless communications protocol;

the first and second broadcast short-range communications unit are short-range as compared to the second range of the at least one mobile device when using the second wireless communications protocol;

the one or more first broadcast messages are received and the at least one message is caused to be sent via the same network I/O unit;

the one or more first broadcast messages are received and the at least one message is caused to be sent via different network I/O units;

the first broadcast short-range communications unit is configured to automatically generate the one or more first broadcast messages for an unsolicited broadcast thereof;

the Internet protocol includes a Transmission Control Protocol/Internet protocol;

the plurality of facilities include one or more spaces;

the plurality of facilities include one or more departments;

the building includes a retail space;

the building includes a retail space in a shopping mall;

the first visual information, the second visual information, the first location-relevant information, the second location-relevant information, and the causing to be output, are mobile device-independent;

the first broadcast short-range communications unit includes a dedicated unit;

the first broadcast short-range communications unit includes a network information outlet;

the first broadcast short-range communications unit includes a dedicated short-range communications roadside unit;

the first broadcast short-range communications unit is capable of only transmitting;

the first broadcast short-range communications unit is capable of transmitting and receiving;

the first range of the first broadcast short-range communications unit is that mandated by a Bluetooth wireless communications protocol;

the first fixed location results from an installation of the first broadcast short-range communications unit at the first fixed location;

the first fixed location results from an installation of the first broadcast short-range communications unit, which is initially portable, at the first fixed location;

the second fixed location results from an installation of the second broadcast short-range communications unit at the second fixed location;

the second fixed location results from an installation of the second broadcast short-range communications unit, which is initially portable, at the second fixed location;

the first wireless communications protocol includes a Bluetooth protocol;

the second visual information, the second visual information, the second location-relevant information, the second location-relevant information, and the causing to be output, are mobile device-independent;

the second broadcast short-range communications unit includes a dedicated unit;

the second broadcast short-range communications unit includes a network information outlet;

the second broadcast short-range communications unit includes a dedicated short-range communications roadside unit;

the second broadcast short-range communications unit is capable of only transmitting;

the second broadcast short-range communications unit is capable of transmitting and receiving;

the first range of the second broadcast short-range communications unit is that mandated by a Bluetooth wireless communications protocol;

the second fixed location results from an installation of the second broadcast short-range communications unit at the second fixed location;

the second wireless communications protocol includes a Bluetooth protocol;

the causing to be output is carried out, at least in part, by the at least one mobile device and is caused, at least in part, by the code;

the causing to be output is carried out, at least in part, by the at least one mobile device and is supported, at least in part, by the code;

the causing to be output is based on the first location-relevant information, by outputting at least a portion of the first location-relevant information;



the causing to be output is based on the first location-relevant information, by causing output of the first visual information so as to include at least a portion of the first location-relevant information;

the causing to be output is based on the second location-relevant information, by outputting at least a portion of the second location-relevant information;

the causing to be output is based on the second location-relevant information, by causing output of the second visual information so as to include at least a portion of the second location-relevant information;

the causing to be output is based on the first location-relevant information and the second location-relevant information, by causing output of the first visual information and the second visual information, so as to include different portions of a set of location-relevant information;

the code is part of an application;

the first location-relevant information includes first particular information that is relevant to the first fixed location;

the first location-relevant information includes first particular information that is relevant to a brand located at a location;

the first location-relevant information includes first particular information that is relevant to a product located at a location;

the first location-relevant information is associated with the at least one first value, by being retrieved based on the at least one first value;

the first location-relevant information is associated with the at least one first value, so as to be retrieved from memory on the at least one mobile device based on the at least one first value;

the first location-relevant information is associated with the at least one first value, so as to be retrieved from memory on the at least one server based on the at least one first value;

the first visual information is caused to be output based on the first location-relevant information, by including at least a portion of the first location-relevant information;

the first visual information is caused to be output based on the first location-relevant information, by being triggered in response to the receipt of the response message including the first location-relevant information;

the one or more first broadcast messages, the at least one message, and the response message are of a different format;

the one or more first broadcast messages and the at least one message are identical;

the one or more first broadcast messages, the at least one message, and the response message are the same in at least one aspect;

the one or more first broadcast messages, the at least one message, and the response message are different in at least one aspect;

the first visual information is derived from the first location-relevant information;

the first visual information is based on the first location-relevant information;

the first visual information includes at least a portion of the first location-relevant information;

the second location-relevant information includes second particular information that is relevant to the second fixed location;

the second location-relevant information includes second particular information that is relevant to a brand located at a location;

the second location-relevant information includes second particular information that is relevant to a product located at a location;

the second location-relevant information is associated with the at least one second value, by being retrieved based on the at least one second value;

the second location-relevant information is associated with the at least one second value, so as to be retrieved from memory on the at least one mobile device based on the at least one second value;

the second location-relevant information is associated with the at least one second value, so as to be retrieved from memory on the at least one server based on the at least one second value;

the second visual information is caused to be output based on the second location-relevant information, by including at least a portion of the second location-relevant information;

the second visual information is caused to be output based on the second location-relevant information, by being triggered in response to the receipt of the response message including the second location-relevant information;

the one or more second broadcast messages, the at least one message, and the response message are of a different format;

the one or more second broadcast messages and the at least one message are identical;

the one or more second broadcast messages, the at least one message, and the response message are the same in at least one aspect;

the one or more second broadcast messages, the at least one message, and the response message are different in at least one aspect;

the second visual information is derived from the second location-relevant information;

the second visual information is based on the second location-relevant information;

the second visual information includes at least a portion of the second location-relevant information;

the option includes a selectable option for information delivery being conditioned;

the option includes a selectable option for information delivery being conditioned on a service attribute;

the option includes a selectable option related to at least one aspect of information delivery;

the option is caused to be displayed after the receipt of the indication of the receipt of the one or more first broadcast messages;

the option is caused to be displayed before the receipt of the indication of the receipt of the one or more first broadcast messages;

the option is caused to be displayed after the receipt of the indication of the receipt of the one or more second broadcast messages;

the option is caused to be displayed before the receipt of the indication of the receipt of the one or more second broadcast messages;

the output of the first visual information and the second visual information is caused after the receipt of the response message, by being caused in response to the receipt of the response message;

the output of the first visual information is caused in response to the receipt of the indication of the receipt of the one or more first broadcast messages, by retrieving the first location-relevant information from memory on the at least one mobile device in response to the receipt of the indication of the receipt of the one or more first broadcast messages;

the one or more first broadcast messages are broadcasted and re-broadcasted for intended receipt by the plurality of mobile devices in the communication range of the first broadcast short-range communications unit, where the one or more first broadcast messages

are broadcasted and re-broadcasted for intended receipt by the plurality of mobile devices at the same time;

the one or more first broadcast messages are broadcasted and re-broadcasted for intended receipt by the plurality of mobile devices in the communication range of the first broadcast short-range communications unit, where the one or more first broadcast messages are broadcasted and re-broadcasted for intended receipt by the plurality of mobile devices at different times;

the causation of the output of the first visual information is triggered based on a location of the at least one mobile device;

the causation of the output of the first visual information is triggered based on the receipt of the indication of the receipt of the one or more first broadcast messages;

the causation of the output of the first visual information and the second visual information is conditioned on the receipt of the indication of the user input;

the first visual information is automatically caused to be output after requiring communication of the at least one message with the at least one server after the receipt of the indication of the receipt of the one or more first broadcast messages;

the second visual information is automatically caused to be output after requiring communication of the at least one message with the at least one server after the receipt of the indication of the receipt of the one or more second broadcast messages;

the first visual information is automatically caused to be output without requiring communication of the at least one message with the at least one server after the receipt of the indication of the receipt of the one or more first broadcast messages;

the second visual information is automatically caused to be output without requiring communication of the at least one message with the at least one server after the receipt of the indication of the receipt of the one or more second broadcast messages;

the first visual information is automatically caused to be output without requiring communication of the at least one message with the first broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more first broadcast messages, by not requiring the communication of the at least one message, but allowing the communication of the at least one message;

the first visual information is automatically caused to be output by requiring communication of the at least one message with the first broadcast short-range communications unit before the receipt of the indication of the receipt of the one or more first broadcast messages;

the second visual information is automatically caused to be output by requiring communication of the at least one message with the second broadcast short-range communications unit before the receipt of the indication of the receipt of the one or more second broadcast messages;



the first visual information is automatically caused to be output without requiring communication of the at least one message with the first broadcast short-range communications unit before the receipt of the indication of the receipt of the one or more first broadcast messages;

the second visual information is automatically caused to be output without requiring communication of the at least one message with the second broadcast short-range communications unit before the receipt of the indication of the receipt of the one or more second broadcast messages;

the output of the second visual information is caused in response to the receipt of the indication of the receipt of the one or more second broadcast messages, by retrieving the second location-relevant information from memory on the at least one mobile device in response to the receipt of the indication of the receipt of the one or more second broadcast messages;

the one or more second broadcast messages are broadcasted and re-broadcasted for intended receipt by the plurality of mobile devices in the communication range of the second broadcast short-range communications unit, where the one or more second broadcast messages are broadcasted and re-broadcasted for intended receipt by the plurality of mobile devices at the same time;

the one or more second broadcast messages are broadcasted and re-broadcasted for intended receipt by the plurality of mobile devices in the communication range of the second broadcast short-range communications unit, where the one or more second broadcast

messages are broadcasted and re-broadcasted for intended receipt by the plurality of mobile devices at different times;

the causation of the output of the second visual information is triggered based on a location of the at least one mobile device;

the causation of the output of the second visual information is triggered based on the receipt of the indication of the receipt of the one or more second broadcast messages;

the causation of the output of the second visual information and the second visual information is conditioned on the receipt of the indication of the user input;

the at least one server includes a proxy server; or

the system further comprises the at least one mobile device.

**Remarks:**

The summary has been amended to include subject matter disclosed in U.S. Provisional Application filed 03/01/011 under serial number 61/517,584, which is incorporated in the instant application by reference in its entirety. No new matter has been added.

Claims 1, 15 and 28 are rejected on the ground of non-statutory double patenting as being unpatentable over claim 1 of U.S. Patent No. 9973899. Such rejection is deemed avoided by the terminal disclaimer filed herewith.

Claim 29 is rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite. Such rejection is deemed overcome by virtue of the claim amendments hereinabove.

Claim(s) 1-9, 11-15 and 17-30 is/are rejected under pre-AIA 35 U.S.C. 102(e) as being anticipated by Sakano (US 2013/0295907). Applicant respectfully disagrees with such rejection, particularly in view of the clarifications made to the claims hereinabove. See below, for example, with respect to Claim 1 (see each independent claims for claim terms thereof):

“1. (Currently Amended) A system, comprising:

a building including a plurality of facilities therein, the building including:

a first broadcast short-range communications unit having a first fixed location and configured to:

generate one or more first broadcast messages including at least one first value,

broadcast, via a first wireless communications protocol, the one or more first broadcast messages including the at least one first value, for intended receipt by a plurality of mobile devices in a communication range of the first broadcast short-range communications unit, and

re-broadcast, via the first wireless communications protocol, the one or more first broadcast messages including the at least one first value, for intended receipt by the plurality of mobile devices in the communication range of the first broadcast short-range communications unit, and

a second broadcast short-range communications unit having a second fixed location and configured to:

generate one or more second broadcast messages including at least one second value,

broadcast, via the first wireless communications protocol, the one or more second broadcast messages including the at least one second value, for intended receipt by the plurality of mobile devices in a communication range of the second broadcast short-range communications unit, and

re-broadcast, via the first wireless communications protocol, the one or more second broadcast messages including the at least one second value, for intended receipt by the plurality of mobile devices in the communication range of the second broadcast short-range communications unit;

code configured to be executed by at least one of the plurality of mobile devices, the code, when executed, configured to:

cause display, via a display of the at least one mobile device, of an option for causing first visual information and second visual information to be output via the at least one mobile device,

receive an indication of a user input for the option displayed via the display of the at least one mobile device,

receive an indication of a receipt, from the first broadcast short-range communications unit and via the first wireless communications protocol, of the one or more first broadcast messages including the at least one first value,

receive an indication of a receipt, from the second broadcast short-range communications unit and via the first wireless communications protocol, of the one or more second broadcast messages including the at least one second value, and

cause to be sent, from the at least one mobile device and via a second wireless communications protocol and an Internet Protocol over the Internet at least in part, at least one message, where the first wireless communications protocol and the second wireless communications protocol are different and a first range of the first broadcast short-range communications unit and the second broadcast short-range communications unit when using the first wireless communications protocol is shorter than a second range of the at least one mobile device when using the second wireless communications protocol, and further where the at least one message does not pass through the first broadcast short-range communications unit nor the second broadcast short-range communications unit; and

at least one server that is configured to communicate with the at least one mobile device via the Internet, the at least one server configured to:

receive, from the at least one mobile device and via the Internet protocol over the Internet at least in part, the at least one message,

in response to the receipt, from the at least one mobile device and via the Internet protocol over the Internet at least in part, of the at least one message: retrieve first location-relevant information and second location-relevant information, and

after the location-relevant information is retrieved, cause to be sent, from the at least one server to the at least one mobile device and via the Internet protocol over the Internet at least in part, a response message including the first location-relevant information and the second location-relevant information;

said code, when executed, further configured to:

receive, from the at least one server and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part, the response message including the first location-relevant information and the second location-relevant information,

after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the first location-relevant information and the second location-relevant information: cause to be output, via the at least one mobile device, the first visual information based on the first location-relevant information, and

after the receipt, from the at least one server and via the second wireless communications protocol, of the response message including the first location-relevant information and the second location-relevant information; after the first visual information is caused to be output based on the first location-relevant information; and after the at least one mobile device is moved in the building: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information;

wherein the system is configured such that the first visual information is automatically caused to be output without requiring communication of the at least one message with the first broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more first broadcast messages, and the second visual information is automatically caused to be output without requiring communication of the at least one message with the second broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more second broadcast messages.” (emphasis added).

For example, Sakano clearly teaches, in Figures 16 & 19 (for example), that the wireless communication terminal 400 receives beacons and service information FROM the wireless base station 300 using a single wireless LAN service.

FIG. 16

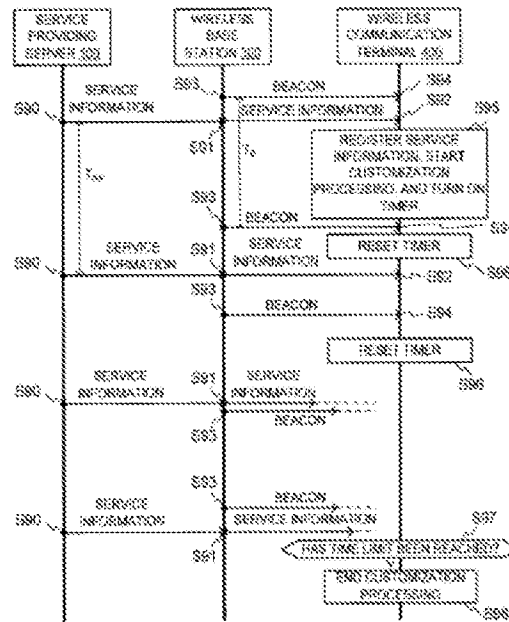
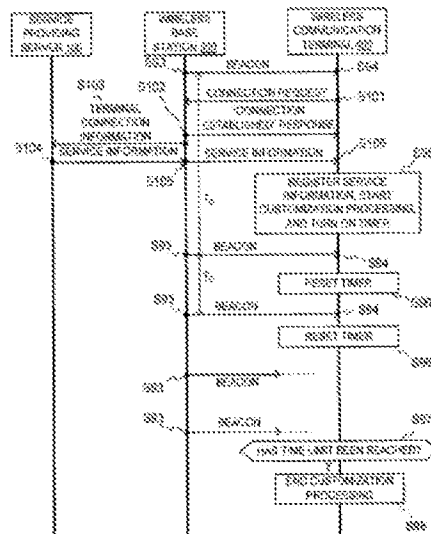


FIG. 19



Thus, while such excerpts from Sakano does teach receiving a beacon/service information FROM the wireless base station 300 using a single wireless LAN service, such Sakano excerpts clearly do not even suggest that the at least one message is “cause[d] to be sent, **FROM** the at least one mobile device and via a **second** wireless communications protocol and an Internet Protocol **over the Internet at least in part**....where the first wireless communications protocol and the second wireless communications protocol are **DIFFERENT** and a first range of the first broadcast short-range communications unit and the second broadcast short-range communications unit when using the first wireless communications protocol is **SHORTER than a second range of the at least one mobile device when using the second wireless communications protocol**, and further where the at least one message does **NOT** pass through the first broadcast short-range communications unit **NOR** the second broadcast short-range communications unit”, in the specific context claimed (emphasis added), so as to “receive, from the at least one server and via the **second** wireless communications protocol and the Internet Protocol **over the Internet at least in part**, the response message including the first location-relevant information and the second location-relevant information,” in the specific context claimed (emphasis added).

Still yet, applicant has incorporated at least a portion of Claim 8 into each of the independent claims in the specific context claimed. With regard to such claim and context, the Examiner has relied on Claims 3-4 from Sakano (reproduced below):

“3. A wireless communication terminal according to claim 2, wherein, in the customization processing, when application software associated with application identification information in the service information contained in information carried on the wireless signal from the wireless base station is stored in the memory, a utilization priority level of the application software associated with application identification information is priority, and the customized setting that is set beforehand is in an automatic start-up mode, then the control module automatically starts up the application software.

4. A wireless communication terminal according to claim 3, further comprising, an input unit; and a display unit; wherein, in the customization processing, when a setting instruction of automatic start-up application software is received via the input unit while



identification information of application software is being displayed in a state where the application software is not started up, the control module registers the identification information in the memory as identification information of application software to be started up automatically.”

As a preliminary matter, applicant respectfully points out that the aforementioned “automatic start-up” is taught to be caused when service information is received. See excerpt from Sakano below:

“[0069] ... In addition, the flash ROM 440 contains a customization mode storing area 445, where customization modes described later are stored, and an applications-to-be-automatically-started-up list 446, which holds identification information of application software to be started up *automatically* when service information is received.”  
(emphasis added)

It is also important to note that the Examiner appears to rely on Sakano’s “beacon” to meet applicant’s claimed “broadcast messages,” and Sakano’s “wireless base station[s] 300” to meet applicant’s claimed “broadcast short-range communications unit[s].” However, as shown by S92/S95 & S106/S95 in Figures 16 & 19 above (respectively), after the broadcasted beacon is received, the service information is taught to be received FROM the wireless base station 300, in order to cause the aforementioned “automatic start-up” that is referenced by the Examiner.

To this end, the foregoing Sakano excerpts clearly do not teach applicant’s claimed system including a “server configured to: RECEIVE, FROM the at least one mobile device and via the Internet protocol over the Internet at least in part, the at least one message” and “code... configured to: receive, from the at least one server and via the second wireless communications protocol and the Internet Protocol over the Internet at least in part, the response message including the first location-relevant information and the second location-relevant information,” in the specific context “such that the first visual information is automatically caused to be output without requiring communication of the at least one message with the first broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more first broadcast messages, and the second visual

information is automatically caused to be output without requiring communication of the at least one message with the second broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more second broadcast messages”, in the specific manner currently claimed (emphasis added).

The other independent claims are deemed allowable for similar, but not identical, reasons (see each independent claim for the claim terms thereof). The Examiner’s rejections of the dependent claims are also deficient.

With respect to Claim 2, the Examiner argues that “P[0169], user has to turn on the wireless device: wireless service at the current location is displayed to users without advanced knowledge of the SSID).” Applicant respectfully points out the amendment below that distinguishes the hypothetical scenario relied upon by the Examiner: “wherein the system is configured such that the at least one message and the response are communicated: after the receipt of the indication of the receipt of the user input while the at least one mobile device is already turned on, before the receipt of the indication of the receipt of the one or more first broadcast messages, and before the receipt of the indication of the receipt of the one or more second broadcast messages,” in the specific context claimed (emphasis added).

With respect to Claim 5, the Examiner has relied paragraph [0077] below to meet applicant’s claimed “system ... configured such that the first broadcast short-range communications unit broadcasts the one or more first broadcast messages and the second broadcast short-range communications unit broadcasts the one or more second broadcast messages, so that both the one or more first broadcast messages and the one or more second broadcast messages include: a first identifier field with at least one third value that is the same, and a second identifier field with at least one of the at least one first value or the at least one second value that are different, so that the second location-relevant information is caused as the at least one mobile device is moved among the plurality of the facilities of the building,” in the specific context claimed.

[0077] The service "manner mode" is a service that automatically puts the wireless communication terminal 400 of each user into a manner mode. The service "Train service information" is a service that notifies users of what train the users are on, the route along which the train is run, and a train service status of other routes connecting to the route. The service "get-off station alert" is a service to notify a user, when the train approaches the station at which the user is to get off the train, that the train will arrive the station at anytime soon. The service "on-board entertainment" is a service that provides news, weathercasts, entertainment information, advertisements, and the like to general passengers. The service "train operation assistance" is a service that assists the duties of the train operator and the conductor.

As mentioned earlier, it is important to note that the Examiner is relying on Sakano's "beacon" to meet applicant's claimed "broadcast messages." However, nowhere in the aforementioned excerpt does Sakano disclose its "**beacon**" including "a first identifier field with at least one third value that is the **same**, and a second identifier field with at least one of the at least one first value or the at least one second value that are **different**, so that the second location-relevant information is caused as the at least one mobile device is moved among the plurality of the facilities of the building," in the specific context claimed.

A notice of allowance or proper prior art showing is respectfully requested.

It is believed that all of the pending issues have been addressed. The claims are in condition for allowance. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Still yet, nothing in this reply should be construed as intention to concede any issue with regard to any claim, except as specifically stated in this reply. Finally, it should be noted that no claim is intended to be construed under 35 U.S.C. 112, paragraph 6.

Should the Examiner deem that any further amendment is desirable to place this Application in condition for allowance, Applicant invites the Examiner to telephone the undersigned attorney at the number listed below.

Respectfully submitted,



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